

ABSTRACT

A technique for determining an offset-reduced Hall voltage (U_h), and/or an offset voltage ($U_{h, offset}$) of a Hall sensor (1) includes applying a Hall sensor current (I) at first and second taps (a1, a2, a3) of the Hall sensor (1), and determining a first Hall voltage (U_{h1}) at third and fourth taps(a3, a4) displaced from the first and second taps(a1, a2, a5). A second Hall sensor current is applied modified relative to the first, and a second Hall voltage (U_{h2}) is determined. The Hall voltage (U_h) and/or Hall voltage offset ($U_{h,offset}$) are determined from the first and second Hall voltages. To compensate any offset present, a second measurement applies the second Hall sensor current I at taps (a3, a4) that are spatially displaced relative to the first and/or second taps.